

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-15 canceled.

16. (Previously Presented) A method of scheduling tasks within a computing device, comprising the steps of:

a) maintaining a multi-level work queue of a plurality of waiting tasks awaiting scheduling, said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) scheduling tasks from the highest priority level of said work queue into a job queue, for scheduling a first task from said multi-level work queue into said job queue;

c) attempting to locate a selected task from within the job queue which is capable of being executed simultaneously with the first task, while considering only the tasks in said job queue with a priority equal to that of the first task; and

d) if such a selected task is located, replacing said selected task with a combined task that comprises the first task and the selected task for simultaneous execution.

17. (Previously Presented) A processor for scheduling tasks within a computing device, comprising:

a) instructions for accessing a multi-level work queue of a plurality of waiting tasks awaiting scheduling, said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) instructions for scheduling tasks from said multi-level work queue into a job queue, commencing with the tasks with the highest priority;



c) instructions for attempting to locate at least one selected task from within the job queue which is capable of being executed simultaneously with a first task currently being scheduled, while considering only the tasks in said job queue with a priority equal to that of the first task; and

d) instructions for combining the selected task with the first task to form a combined task and replacing said selected task in said job queue with the combined task for simultaneous execution of said first task with said selected task, in the event that such a selected task is located.

18. (Previously Presented) A software-readable medium containing instructions for scheduling tasks within a computing device, comprising:

a) instructions for accessing a multi-level work queue of a plurality of waiting tasks awaiting scheduling; said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task and each task has an associated priority, and wherein the processor further comprises instructions for selecting as the first task a waiting task for which no other waiting task has a higher priority;

c) instructions for attempting to locate at least one selected task comprise instructions for considering only waiting tasks having a priority equal to that of the first task; and

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that at least one selected task is located.

19. (Previously Presented) A method of scheduling tasks within a computing device, comprising the steps of:

a) maintaining a multi-level work queue of a plurality of waiting tasks awaiting scheduling, said waiting tasks being ordered in said multi-level work queue according to an associated priority;

b) scheduling said waiting tasks from said multi-level work queue into a job queue;

c) determining whether the computing device has sufficient resources to execute a first task being currently scheduled;

d) if the computing device has sufficient resources to execute the first task, the method comprising the further steps of:

e) attempting to locate a selected task from within the job queue which is capable of being executed simultaneously with the first task, while considering only the tasks in the job queue that have a priority equal to that of the first task;

f) if such a selected task is located, replacing said waiting task with a combined task that comprises the first task and the waiting task for simultaneous execution of said first task with said selected.

20. (Previously Presented) The method of claim 19 further comprising, if the computing device does not have sufficient resources to execute the first task, the steps of:

a) determining whether the first task is time sensitive;

b) if the first task is time sensitive, rejecting the first task; and

c) if the first task is not time sensitive, attempting to schedule a next task of the same priority as said first task before re-attempting to schedule the first task.

21. (Previously Presented) A processor for scheduling a first task within a computing device, comprising:

a) instructions for accessing a work queue of a plurality of waiting tasks waiting scheduling;

b) instructions for determining whether the computing device has sufficient resources to execute the first task and for determining whether the first task is time sensitive, in the event that the computing device does not have sufficient resources to execute the first task;

c) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task and for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive;

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located; and

e) instructions for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive.

22. (Previously Presented) A software-readable medium comprising instructions for scheduling a first task within a computing device, comprising:

a) instructions for accessing a work queue of a plurality of waiting tasks awaiting scheduling and for determining whether the first task is time sensitive, in the event that the

computing device does not have sufficient resources to execute the first task;

b) instructions for determining whether the computing device has sufficient resources to execute the first task and for rejecting the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is time sensitive;

c) instructions for attempting to locate at least one selected task from within the work queue which is capable of being executed simultaneously with the first task, in the event that the computing device has sufficient resources to execute the first task and for attempting to schedule a second task before attempting to schedule the first task, in the event that the computing device does not have sufficient resources to execute the first task and that the first task is not time sensitive; and

d) instructions for combining the at least one selected task with the first task to form a combined task and scheduling the combined task, in the event that the computing device has sufficient resources to execute the first task and that at least one selected task is located.

Claims 23 - 26 (CANCELLED).